hydroxide solution. After the organic phase was washed with water, it was concentrated by evaporation.

Flash point 136-137°C

6-[[4-Bromo-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 4-bromo-6-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole with 6-bromohexanoic acid methyl ester according to general operating instructions 8.

Flash point 136°C

Example 173

6-[[4-Acetyl-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

0.5 g of 4-bromo-6-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole, 0.37 ml (α-ethoxyvinyl)tributyltin, and 140 mg of dichlorobis(triphenylphosphine)palladium were stirred in 10 ml of toluene for 18 hours at 100°C. After cooling, it was stirred with 2N aqueous hydrochloric acid for 0.25 hour. After phase separation, the organic phase was washed with water and concentrated by evaporation. The residue was chromatographed on silica gel with a hexane/ethyl acetate mixture.

Flash point 114-115°C

Example 174

6-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester

a) 5-Methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole

16.8 g of 5-methoxy-2-phenyl-1H-benzimidazole (Bull. Sci. Fac. Chim. Ind. Bologna, 11, **1953**, 42) and 20.4 g of 4-(methylbenzene)boronic acid are reacted according to general operating instructions 14.

^{1}H-NMR ($CDCl_3$): δ = 2.45 s (3H); 3.91 s (3H); 6.90 dd (J = 8, 2 Hz, 1H); 7.12 d (J = 8 Hz, 1H); 7.18 d (J = 8 Hz, 2H); 7.25-7.38 m (6H); 7.57 m (2H).

In addition, 6-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole was obtained.

b) 5-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole
was obtained from 5-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole according to general operating instructions 6.

Flash point 270°C

6-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester
was obtained from 5-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole by reaction with 6-bromohexanoic acid methyl ester according to general operating instructions 8.

^{1}H-NMR ($CDCl_3$): δ = 1.48-1.92 m (6H); 2.38 t (J = 7.5 Hz, 2H); 2.46 s (3H); 3.69 s (3H); 4.06 t (J = 7.5 Hz, 2H); 6.89 dd

(J = 8, 2 Hz, 1H); 7.11 d (J = 8 Hz, 1H); 7.18 d (J = 8 Hz, 2H); 7.24-7.37 m (6H), 7.57 m (2H).

Example 175

6-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid

was obtained from 6-[[1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester according to general operating instructions 9.

^{1}H-NMR (D_6-DMSO): δ = 1.41-1.67 m (4H); 1.70-1.83 m (2H); 2.26 t (J = 7.5 Hz, 2H); 2.43 s (3H); 4.05 t (J = 7.5 Hz, 2H); 6.90 dd (J = 8, 2 Hz, 1H); 7.04 d (J = 8 Hz, 1H); 7.23-7.40 m (8H); 7.52 m (2H); 11.92 s (br.)(1H).

Example 176

6-[[2-Phenyl-1-[4-(thiomethyl)phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester

a) 6-[[2-Phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester

4.84 g of 2-phenyl-5-hydroxy-1H-benzimidazole (Izv. Akad. Nauk. SSSR Ser. Chim. 8, **1990**, 1888) was obtained by reaction with 6-bromohexanoic acid methyl ester according to general operating instructions 8.

^{1}H-NMR ($CDCl_3$): δ = 1.43-1.58 m (2H); 1.64-1.87 m (4H); 2.37 t (J = 7.5 Hz, 2H); 3.69 s (3H); 3.94 t (J = 7.5 Hz, 2H); 6.87 dd (J = 8, 2 Hz, 1H); 7.02 s (br.); 7.40-7.57 m (4H); 8.05 m (2H).

6-[[2-Phenyl-1-[4-(thiomethyl)phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with 4-(thiomethylbenzene)boronic acid according to general operating instructions 14.

^{1}H-NMR ($CDCl_3$): δ = 1.48-1.61 m (2H); 1.66-1.92 m (4H); 2.36 t (J = 7.5 Hz, 2H); 2.54 s (3H); 3.68 s (3H); 4.05 t (J = 7.5 Hz, 2H); 6.90 dd (J = 8, 2 Hz, 1H); 7.11 d (J = 8 Hz, 1H); 7.22 d (J = 8 Hz, 2H); 7.27-7.49 m (6H); 7.57 m (2H).

Example 177

6-[[2-Phenyl-1-[(4-thiomethyl)phenyl]-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with 4-(thiomethylbenzene)boronic acid according to general operating instructions 14.

^{1}H-NMR ($CDCl_3$): δ = 1.45-1.57 m (2H); 1.62-1.86 m (4H); 2.44 t (J = 7.5 Hz, 2H); 2.56 s (3H); 3.66 s (3H); 3.93 t (J = 7.5 Hz, 2H); 6.66 d (J = 2 Hz, 1H); 6.96 dd (J = 8, 2 Hz, 1H); 7.18-7.39 m (7H); 7.54 m (2H); 7.73 d (J = 8 Hz, 1H).

09765367.1

Example 178

6-[[2-Phenyl-1-(3-thienyl)-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with thiophene-3-boronic acid according to general operating instructions 14.

^{1}H-NMR ($CDCl_3$): δ = 1.48-1.62 m (2H); 1.66-1.92 m (4H); 2.47 t (J = 7.5 Hz, 2H); 3.68 s (3H); 4.04 t (J = 7.5 Hz, 2H); 6.93 dd (J = 8, 2 Hz, 1H); 6.98 dd (J = 5, 1 Hz, 1H); 7.18 d (J = 8 Hz, 1H); 7.28 dd (J = 3, 1 Hz, 1H); 7.30-7.40 m (4H); 7.46 dd (J = 5, 3 Hz, 1H); 7.60 m (2H).

Example 179 6-[[2-Phenyl-1-(3-thienyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with thiophene-3-boronic acid according to general operating instructions **14**.

^{1}H-NMR ($CDCl_3$): δ = 1.45-1.58 m (2H); 1.64-1.87 m (4H); 2.35 t (J = 7.5 Hz, 2H); 3.67 s (3H); 3.97 t (J = 7.5 Hz, 2H); 6.74 d (J = 2 Hz, 1H); 6.95 dd (J = 8, 2 Hz, 1H); 7.01 dd (J = 5, 1 Hz, 1H); 7.29 dd (J = 3, 1 Hz, 1H); 7.30-7.38 m (4H); 7.47 dd (J = 5, 3 Hz, 1H); 7.58 m (2H); 7.73 d (J = 8 Hz, 1H).

Example 180

4-[3-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenoxy]butanoic acid methyl ester

a) 6-(3-Methoxyphenoxy)-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole

was obtained from 6-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole and 3-methoxybenzeneboronic acid according to general operating instructions 14.

Flash point 120-122°C

b) 3-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenol

was obtained by reaction of 6-(3-methoxyphenoxy)-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole according to general operating instructions 6 with the addition of 10 mol% of hexadecyltributyl phosphonium bromide.

Flash point 252-253°C

4-[3-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenoxy]butanoic acid methyl ester

was obtained by reaction of 3-[[1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenol with 4-bromobutyric acid methyl ester according to general operating instructions 8.

^{1}H-NMR ($CDCl_3$): δ = 2.00-2.13 m (2H); 2.43 s (3H); 2.50 t (J = 7.5 Hz, 2H); 3.67 s (3H); 3.93 t (J = 7.5 Hz, 2H); 6.44-6.62 m (3H); 6.95 d (J = 2 Hz, 1H); 7.06 dd (J = 8, 2 Hz, 1H); 7.12-

7.22 m (3H); 7.25-7.39 m (5H); 7.59 m (2H); 7.87 d (J = 8 Hz, 1H).

Example 181

4-[4-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenoxy]butanoic acid methyl ester

a) 6-(4-Methoxyphenoxy)-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole

was obtained from 6-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole and 4-methoxybenzeneboronic acid according to general operating instructions 14.

^{1}H-NMR ($CDCl_3$): δ = 2.44 s (3H); 3.79 s (3H); 6.82-6.98 m (5H); 7.01 dd (J = 8, 2 Hz, 1H); 7.17 d (J = 8 Hz, 2H); 7.25-7.41 m (5H); 7.57 m (2H); 7.82 d (J = 8 Hz, 1H).

b) 4-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenol

was obtained by reaction of 6-(3-methoxyphenoxy)-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole according to general operating instructions 6 with the addition of 10 mol% of hexadecyltributyl phosphonium bromide.

^{1}H-NMR (D_6-DMSO): δ = 2.38 s (3H); 6.61 d (J = 2 Hz, 1H); 6.74 d (J = 8 Hz, 2H); 6.86 d (J = 8 Hz, 2H); 6.91-7.01 m (2H); 7.22-7.41 m (6H); 7.49 m (2H); 7.75 d (J = 8 Hz, 1H); 9.32 s (1H).

09755603.011501

4-[4-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenoxy]butanoic acid methyl ester
was obtained by reaction of 4-[[1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenol with 4-bromobutyric acid methyl ester according to general operating instructions 8.

^{1}H-NMR ($CDCl_3$): δ = 2.03-2.16 m (2H); 2.42 s (3H); 2.53 t (J = 7.5 Hz, 2H); 3.69 s (3H); 3.97 t (J = 7.5 Hz, 2H); 6.78-6.94 m (5H); 6.99 dd (J = 8, 2 Hz, 1H); 7.16 d (J = 8, Hz, 2H); 7.24-7.38 m (5H); 7.57 m (2H); 7.79 d (J = 8 Hz, 1H).

Example 182

[4-[[1-(4-Methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenoxy]acetic acid methyl ester
was obtained by reaction of 4-[[1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]phenol with bromoacetic acid methyl ester according to general operating instructions 8.

^{1}H-NMR ($CDCl_3$): δ = 2.43 s (3H); 3.82 s (3H); 4.61 s (2H); 6.78-6.96 m (5H); 7.00 dd (J = 8, 2 Hz, 1H); 7.14 d (J = 8, Hz, 2H); 7.23-7.38 m (5H); 7.56 m (2H); 7.80 d (J = 8 Hz, 1H).

Example 183

4-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]butanoic acid methyl ester
was obtained by reaction of 1,2-diphenyl-6-hydroxy-1H-benzimidazole with 4-bromobutanoic acid methyl ester according to general operating instructions 8.

Flash point 107-110°C

10917055.070201

Example 184

6-[[2-Phenyl-1-(3-pyridyl)-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with pyridine-3-boronic acid according to general operating instructions 14.

MS (EI): 415 (molecular ion peak)

Example 185

6-[[2-Phenyl-1-(3-pyridyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with pyridine-3-boronic acid according to general operating instructions 14.

MS (EI): 415 (molecular ion peak)

Example 186

6-[[2-Phenyl-1-(2-pyridyl)-1H-benzimidazol-5-yl]oxy]hexanoic acid

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with 2-fluoro-pyridine according to general operating instructions 15.

MS (EI): 401 (molecular ion peak)

09701056.070101

Example 187

6-[[2-Phenyl-1-(2-pyridyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with 2-fluoro-pyridine according to general operating instructions 15.

MS (EI): 401 (molecular ion peak)

Example 188

6-[[2-Phenyl-1-(4-pyridyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[2-phenyl]-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester with pyridine-4-boronic acid according to general operating instructions 14.

MS (EI): 415 (molecular ion peak)

Example 189

6-[[2-(4-Fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-(phenylamino)phenyl]oxy]hexanoic acid methyl ester with 4-fluorobenzoyl chloride according to general operating instructions 5.

MS (EI): 432 (molecular ion peak)

Example 190

6-[[2-(4-Methoxyphenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-(phenylamino)phenyl]oxy]hexanoic acid methyl ester with 4-methoxybenzoyl chloride according to general operating instructions 5.

MS (EI): 444 (molecular ion peak)

Example 191

6-[[2-(3-Fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-(phenylamino)phenyl]oxy]hexanoic acid methyl ester with 3-fluorobenzoyl chloride according to general operating instructions 5.

MS (EI): 432 (molecular ion peak)

Example 192

6-[[2-(4-Bromophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-(phenylamino)phenyl]oxy]hexanoic acid methyl ester with 4-bromobenzoyl chloride according to general operating instructions 5.

MS (EI): 492/494 (molecular ion peaks)

Example 193

6-[[2-[4-(Trifluoromethyl)phenyl]-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-(phenylamino)phenyl]oxy]hexanoic acid methyl ester with 4-(trifluoromethyl)benzoyl chloride according to general operating instructions 5.

MS (EI): 482 (molecular ion peak)

Example 194

6-[[2-(4-Fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was obtained by reaction of 6-[[2-(4-fluorophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester according to general operating instructions 9.

MS (EI): 418 (molecular ion peak)

Example 195

6-[[1-Phenyl-2-(benzothien-2-yl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-(phenylamino)phenyl]oxy]hexanoic acid methyl ester with benzothiophene-2-carboxylic acid chloride according to general operating instructions 5.

Flash point 129-130°C

Example 196

6-[[1-Phenyl-2-(benzothien-2-yl)-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 340°C (decomposition)

Example 197

6-[[5-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid isopropyl ester

Example 198

6-[[6-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid isopropyl ester

4,5-Dimethoxy-1,2-dinitrobenzene was hydrogenated to the diamino compound according to general operating instructions 1, and said compound was cyclized with trimethyl orthobenzoate to 5,6-dimethoxy-2-phenyl-1H-benzimidazole (flash point 131-133°C) as crude product according to general operating instructions 3. This benzimidazole derivative was reacted with 4-methylphenylboronic acid to 5,6-dimethoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole (flash point 145-148°C) according to general operating instructions 14. After ether cleavage with hydrobromic acid according to general operating instructions 6 to 5,6-dihydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole (^{1}H-NMR of hydrobromide (D_6-DMSO): δ = 2.42 ppm s (3H); 6.68 s (1H); 7.22 s (1H); 7.40-7.62 m (10H)), it was alkylated with 6-bromohexanoic acid isopropyl ester according to general operating

instructions 8. 6-[[5-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid isopropyl ester

flash point 137-139°C

and 6-[[6-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid isopropyl ester

flash point 177-178°C

were obtained.

Example 199

6-[[5-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 245-248°C

Example 200

6-[[6-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 182-184°C

Example 201

6-[[5-Methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid isopropyl ester

6-[[5-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid isopropyl ester was methylated with methyl iodide according to general operating instructions 8.

Flash point 89-91°C

Example 202

6-[[5-Methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 184-186°C

Example 203

6-[[5-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

and

Example 204 6-[[6-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]-hexanoic acid methyl ester

were produced with 6-bromohexanoic acid methyl ester analogously to the isopropyl esters by alkylation of 5,6-dihydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazole according to general operating instructions 8. 6-[[5-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester was obtained.

^{1}H-NMR ($CDCl_3$): δ = 1.45-1.58 ppm m (2H); 1.65-1.90 m (4H); 2.37 t (J = 7.5 Hz, 2H); 2.48 s (3H); 3.68 s (3H); 3.98 t (J = 7.5 Hz, 2H); 5.68 s (broad) (1H, OH); 6.62 s (1H); 7.18 d (J = 8 Hz, 2H); 7.22-7.38 m (5H); 7.40 s (1H); 7.53 dd (J = 8, 1 Hz, 2H) and 6-[[6-hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester.

Flash point 141-143°C

10091705.092502

Example 205

6-[[5-Methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

40 mg of 6-[[5-methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid was dissolved in 2 ml of methanol, mixed with 1 drop of concentrated sulfuric acid, and the mixture was stirred for 2 hours. It was mixed with saturated potassium bicarbonate solution, diluted with water, extracted with ethyl acetate, the extracts were dried on sodium sulfate and concentrated by evaporation in a vacuum. The residue was crystallized from diisopropyl ether.

Flash point 81-82°C

Example 206 6-[[6-Methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]-hexanoic acid methyl ester

6-[[6-Hydroxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid methyl ester was methylated with methyl iodide according to general operating instructions 8.

Flash point 108-110°C

Example 207

6-[[6-Methoxy-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-5-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 182-184°C

Example 208 6-[(5-Amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester

a) 3-[(3,4-Dimethylphenyl)amino]-4,6-dinitrophenol

6.6 g of 3,4-dimethylaniline was added to a suspension that consists of 4 g of 4,6-dinitro-3-fluorophenol (J. Org. Chem. 1991, 5958) in 100 ml of ethanol, and it was stirred for 7 days at 40°C. After cooling, it was suctioned off, and the residue was recrystallized from ethanol.

^{1}H-NMR ($CDCl_3$): δ = 2.20 ppm s (6H); 6.43 s (1H); 6.90-7.0 m (2H); 7.14 d (J = 8 Hz, 1H); 9.08 s (1H), 9.70 s (broad) (1H); 10.2-10.6 (1H)

b) 6-[[3-[(3,4-Dimethylphenyl)amino]-4,6-dinitrophenyl]oxy]hexanoic acid methyl ester

5 g of 3-[(3,4-dimethylphenyl)amino]-4,6-dinitrophenol was O-alkylated with 6-bromohexanoic acid methyl ester at 70°C analogously to general operating instructions 8.

^{1}H-NMR ($CDCl_3$): δ = 1.45-1.88 ppm m (6H); 2.30 s (6H); 2.33 t (J = 7.5 Hz, 2H); 3.68 s (3H); 3.88 t (J = 7.5 Hz, 2H); 6.45 s (1H); 7.00-7.08 m (2H); 7.25 d (J = 8 Hz, 1H); 9.03 s (1H); 9.89 s (broad) (1H)

c) 6-[(5-Amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester

2.45 g of 6-[[3-[(3,4-dimethylphenyl)amino]-4,6-dinitrophenyl]oxy]hexanoic acid methyl ester was hydrogenated in methanol according to general operating instructions 1. 500 mg

of the crude product was reacted with benzimidate hydrochloride according to general operating instructions 4. Contrary to general operating instructions 4, after being taken up in solvent, the crude product was not washed with aqueous hydrochloric acid.

^{1}H-NMR ($CDCl_3$): δ = 1.48-1.58 ppm m (2H); 1.62-1.78 m (2H); 1.78-1.90 m (2H); 2.30 s (3H); 2.38 s (3H); 2.38 t (J = 7.5 Hz, 2H); 3.67 s (3H); 3.93 t (J = 7.5 Hz, 2H); 6.56 s (1H); 6.98-7.08 m (2H); 7.18 s (1H); 7.20-7.32 m (4H); 7.52 dd (J = 8 Hz and 2 Hz, 2H)

09765350.011501

Example 209

6-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

6-[(5-Amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

Flash point 186-191°C

Example 210

6-[(5-Amino-2-(4-fluorophenyl)-1-(4-methoxyphenyl)-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester

was produced analogously to 6-[(5-amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester.

MS (EI): 477 (molecular ion peak)

Example 211

6-[(5-Amino-1-(4-methoxyphenyl)-2-(4-methoxyphenyl)-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester

was produced analogously to 6-[(5-amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester.

MS (EI): 489 (molecular ion peak)

Example 212

6-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-2-(4-fluorophenyl)-1-(4-methoxyphenyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

6-[(5-Amino-2-(4-fluorophenyl)-1-(4-methoxyphenyl)-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

Flash point 180-182°C

Example 213

6-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-(4-methoxyphenyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

6-[(5-Amino-1-(4-methoxyphenyl)-2-(4-methoxyphenyl)-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

Flash point 169-171°C

10091701.052502

Example 214

4-[(5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]butanoic acid methyl ester

was produced analogously to 6-[(5-amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester.

^{1}H-NMR ($CDCl_3$): δ = 2.17 ppm tt (J = 8 and 8 Hz, 2H); 2.52 t (J = 8 Hz, 2H); 3.68 s (3H); 3.90 s (3H); 3.98 t (J = 7.5 Hz, 2H); 6.54 s (1H); 7.0 d (J = 12 Hz, 2H); 7.18-7.35 m (6H); 7.50-7.58 m (2H)

Example 215

4-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]butanoic acid methyl ester

4-[(5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]butanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

MS (EI): 605 (molecular ion peak)

Example 216

5-[(5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]pentanoic acid methyl ester

was produced analogously to 6-[(5-amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester.

^{1}H-NMR ($CDCl_3$): δ = 1.78-1.89 ppm m (4H); 2.32 t (J = 8 Hz, 2H); 3.68 s (3H); 3.88 s (3H); 3.92 t (J = 7.5 Hz, 2H); 6.53 s (1H); 7.0 d (J = 12 Hz, 2H); 7.18-7.36 m (6H); 7.48-7.58 m (2H)

Example 217

5-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]pentanoic acid methyl ester

5-[(5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]pentanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

MS (EI): 619 (molecular ion peak)

Example 218

6-[(5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester

was produced analogously to 6-[(5-amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester.

Flash point 129-131°C

Example 219

6-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

6-[(5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

Flash point 168-170°C

Example 220

6-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 181-182°C

Example 221

6-[(5-Amino-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester

was produced analogously to 6-[(5-amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester.

Flash point 105-107°C

Example 222

6-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

6-[(5-Amino-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

Flash point 189-191°C

Example 223

6-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1-(4-methylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 102-105°C

Example 224 5-[(5-Amino-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]pentanoic acid methyl ester

was produced analogously to 6-[(5-amino-1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]-hexanoic acid methyl ester.

^{1}H-NMR ($CDCl_3$): δ = 1.82-1.95 ppm m (4H); 2.39 t (J = 8 Hz, 2H); 3.69 s (3H); 3.92-4.00 m (2H); 6.60 s (1H); 7.26-7.34 m (6H); 7.43-7.58 m (5H)

Example 225 5-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]pentanoic acid methyl ester

5-[(5-Amino-1,2-diphenyl-1H-benzimidazol-6-yl)oxy]pentanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

Flash point 157-161°C

Example 226 5-[[5-[[(4-Chlorophenyl)sulfonyl]amino]-1,2-diphenyl-1H-benzimidazol-6-yl]oxy]pentanoic acid

was produced according to general operating instructions 9.

Flash point 236-242°C

Example 227 6-[[5-[[(4-Fluorophenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

6-[(5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester was reacted with 4-fluorobenzenesulfonic acid chloride according to general operating instructions 13.

MS (EI): 617 (molecular ion peak)

Example 228

6-[[5-[[(4-(Trifluoromethyl)phenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

6-[(5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester was reacted with 4-(trifluoromethyl)benzenesulfonic acid chloride according to general operating instructions 13.

MS (EI): 668 (molecular ion peak)

Example 229

6-[[5-[[(4-Trifluorophenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 190-192°C

Example 230 6-[[5-[[(4-Chlorophenyl)sulfonyl]methylamino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

100 mg of 6-[[5-[[(4-chlorophenyl)sulfonyl]amino]-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester was dissolved in 3 ml of tetrahydrofuran. 10 mg of sodium hydride was added to it at 0°C, it was allowed to stir for 30 minutes, then 50 μl of methyl iodide was added in drops, and it was allowed to stir for another 60 minutes at 0°C. It was

mixed with saturated ammonium chloride solution, extracted three times with ethyl acetate, the organic phases were washed with water, dried on sodium sulfate and concentrated by evaporation in a vacuum. The residue was chromatographed on silica gel.

Flash point 178-180°C

Example 231

[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]acetic acid methyl ester

100 mg of 4-chloro-N-(1,2-diphenyl-1H-benzimidazol-5-yl)benzenesulfonamide was suspended in 0.5 ml of N,N-dimethylformamide, mixed with 8 mg of sodium hydride and stirred for 30 minutes at 20°C. 50 mg of bromoacetic acid methyl ester was added, allowed to stir for 15 hours, mixed with water, extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, concentrated by evaporation in a vacuum, and the residue was chromatographed on silica gel.

^{1}H-NMR ($CDCl_3$): δ = 3.70 ppm s (3H); 4.52 s (2H); 7.20 d (J = 8 Hz, 1H); 7.26-7.58 m (14H); 7.70 d (J = 10 Hz, 2H)

Example 232

[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]acetic acid

was produced according to general operating instructions 9.

Flash point 248°C

Example 233

4-[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]butanoic acid methyl ester

100 mg of 4-chloro-N-(1,2-diphenyl-1H-benzimidazol-5-yl)benzenesulfonamide was suspended in 0.5 ml of N,N-dimethylformamide, mixed with 6 mg of sodium hydride and stirred for 30 minutes at 20°C. 56 mg of 4-bromobutyric acid methyl ester was added, it was allowed to stir for 15 hours, mixed with water, extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, concentrated by evaporation in a vacuum, and the residue was digested with diisopropyl ether.

Flash point 54-58°C

Example 234

4-[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]butanoic acid

was produced according to general operating instructions 9.

Flash point 249-254°C

Example 235

5-[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]pentanoic acid methyl ester

100 mg of 4-chloro-N-(1,2-diphenyl-1H-benzimidazol-5-yl)benzenesulfonamide was suspended in 0.5 ml of N,N-dimethylformamide, mixed with 8 mg of sodium hydride and stirred for 30 minutes at 20°C. 60 mg of 5-bromopentanoic acid methyl ester was added, it was allowed to stir for 15 hours, mixed with

water, extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, concentrated by evaporation in a vacuum, and the residue was chromatographed on silica gel.

^{1}H-NMR ($CDCl_3$): δ = 1.46-1.54 ppm m (2H); 1.62-1.78 m (2H); 2.30 t (J = 8 Hz, 2H); 3.62 s (3H); 3.62 t (J = 8 Hz, 2H); 7.12-7.53 m (17H)

Example 236

5-[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]pentanoic acid

was produced according to general operating instructions 9.

Flash point 123-127°C

Example 237

6-[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]hexanoic acid methyl ester

6-[[1,2-Diphenyl-1H-benzimidazol-5-yl]amino]hexanoic acid methyl ester was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

MS (EI): 588 (molecular ion peak)

Example 238

7-[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]heptanoic acid methyl ester

100 mg of 4-chloro-N-(1,2-diphenyl-1H-benzimidazol-5-yl)benzenesulfonamide was suspended in 0.5 ml of N,N-dimethylformamide, mixed with 8 mg of sodium hydride, and stirred

for 30 minutes at 20°C. 70 mg of 7-bromoheptanoic acid methyl ester was added, it was allowed to stir for 15 hours, mixed with water, extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, concentrated by evaporation in a vacuum, and the residue was chromatographed on silica gel.

^{1}H-NMR ($CDCl_3$): δ = 1.26-1.64 ppm m (8H); 2.27 t (J = 8 Hz, 2H); 3.60 t (J = 8 Hz, 2H); 3.68 s (3H); 7.12 dd (J = 10, 2 Hz, 1H); 7.22 d (J = 10 Hz, 1H); 7.30-7.61 m (15H)

Example 239

7-[[(4-Chlorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]heptanoic acid

was produced according to general operating instructions 9.

Flash point 172-178°C

Example 240

N-(1,2-Diphenyl-1H-benzimidazol-5-yl)-4-fluorobenzenesulfonamide

5-Amino-1,2-diphenyl-1H-benzimidazole was reacted with 4-fluorobenzenesulfonic acid chloride according to general operating instructions 13.

Flash point 209-214°C

Example 241

6-[[(4-Fluorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]hexanoic acid methyl ester

150 mg of N-(1,2-diphenyl-1H-benzimidazol-5-yl)-4-fluorobenzenesulfonamide was suspended in 0.5 ml of N,N-

dimethylformamide, mixed with 12 mg of sodium hydride and stirred for 30 minutes at 20°C. 98 mg of 6-bromohexanoic acid methyl ester was added, allowed to stir for 15 hours, mixed with water, extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, concentrated by evaporation in a vacuum, and the residue was chromatographed on silica gel.

Flash point 128-134°C

Example 242

6-[[(4-Fluorophenyl)sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]amino]hexanoic acid

was produced according to general operating instructions 9.

Flash point 200-210°C

Example 243

6-[[[4-(Trifluoromethyl)phenyl]sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]-amino]hexanoic acid methyl ester

150 mg of 4-(trifluoromethyl)-N-(1,2-diphenyl-1H-benzimidazol-5-yl)benzenesulfonamide was suspended in 0.5 ml of N,N-dimethylformamide, mixed with 11 mg of sodium hydride and stirred for 30 minutes at 20°C. 88 mg of 6-bromohexanoic acid methyl ester was added, it was allowed to stir for 15 hours, mixed with water, extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, concentrated by evaporation in a vacuum, and the residue was digested with diisopropyl ether.

Flash point 159-161°C

Example 244

6-[[[4-(Trifluoromethyl)phenyl]sulfonyl][1,2-diphenyl-1H-benzimidazol-5-yl]-amino]hexanoic acid

was produced according to general operating instructions 9.

Flash point 224-230°C

Example 245

4-Chloro-N-[1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-5-yl]benzenesulfonamide

a) (2,4-Dinitrophenyl)(4-methoxyphenyl)amine

1.43 g of 4-(2,4-dinitroanilino)phenol, 500 mg of potassium carbonate and 0.32 ml of methyl iodide were stirred in 5 ml of N,N-dimethylformamide for 2 days at 20°C. The mixture was poured onto water, extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, concentrated by evaporation in a vacuum, and the residue was chromatographed on silica gel.

Flash point 117-127°C

b) 5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazole

(2,4-Dinitrophenyl)(4-methoxyphenyl)amine was hydrogenated according to general operating instructions 1. The crude product was cyclized with trimethyl orthobenzoate to the benzimidazole derivative according to general operating instructions 3.

^{1}H-NMR ($CDCl_3$): δ = 3.88 ppm s (3H); 6.70 dd (J = 12, 2 Hz, 1H); 6.95-7.06 m (4H); 7.18-7.38 m (7H); 7.53-7.65 m (2H)

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c) 4-Chloro-N-[1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-5-yl]benzenesulfonamide

5-Amino-1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazole was reacted with 4-chlorobenzenesulfonic acid chloride according to general operating instructions 13.

Flash point 238-24°C

Example 246

6-[[(4-Chlorophenyl)sulfonyl][1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-5-yl]amino]hexanoic acid methyl ester

75 mg of 4-chloro-N-[1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-5-yl]benzenesulfonamide was suspended in 0.5 ml of N,N-dimethylformamide, mixed with 6 mg of sodium hydride and stirred for 30 minutes at 20°C. 44 mg of 6-bromohexanoic acid methyl ester was added, allowed to stir for 15 hours, mixed with water, extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, concentrated by evaporation in a vacuum, and the residue was chromatographed on silica gel.

MS (EI): 617 (molecular ion peak)

Example 247

6-[[(4-Chlorophenyl)sulfonyl][1-(4-methoxyphenyl)-2-phenyl-1H-benzimidazol-5-yl]amino]hexanoic acid

was produced according to general operating instructions 9.

Flash point 205-208°C

Example 248

2,2-Dimethyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

a) 2,2-Dimethyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanonitrile was obtained by reaction of 1,2-diphenyl-6-hydroxy-1H-benzimidazole with 6-bromo-1,1-dimethylhexanonitrile according to general operating instructions 8.

Flash point 115-118°C.

b) 2,2-Dimethyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

500 mg of 2,2-dimethyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanonitrile was refluxed for 2 hours in 5 ml of 80% sulfuric acid. After cooling, it was carefully added to ice water, the pH was set at 8 with sodium hydroxide solution, it was extracted three times with ethyl acetate, the extracts were dried on sodium sulfate, and it was concentrated by evaporation in a vacuum. The residue was chromatographed on silica gel.

Flash point 115-118°C

Example 249

8-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]octanoic acid methyl ester

was obtained by reaction of 1,2-diphenyl-6-hydroxy-1H-benzimidazole with 8-bromooctanoic acid methyl ester according to general operating instructions 8.

Flash point 92-95°C

Example 250

8-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]octanoic acid

was produced according to general operating instructions 9.

Flash point 136-140°C

Example 251

6-[[1-(Indan-5-yl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was produced analogously to 6-[[1-(3,4-dimethylphenyl-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester.

Flash point 81-85°C

Example 252

6-[[1-(Indan-5-yl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 176-180°C

Example 253

7-[[1-(Indan-5-yl)-2-phenyl-1H-benzimidazol-6-yl]oxy]heptanoic acid methyl ester

was produced analogously to 6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester.

Flash point 92-98°C

Example 254

7-[[1-(Indan-5-yl)-2-phenyl-1H-benzimidazol-6-yl]oxy]heptanoic acid

was produced according to general operating instructions 9.

Flash point 175-178°C

Example 255

6-[[1-(3-Fluorophenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was produced analogously to 6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester.

Flash point 104-106°C

Example 256

6-[[1-(3-Fluorophenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 149-151°C

Example 257

6-[[2-(4-Nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

a) 6-Methoxy-2-(4-nitrophenyl)-1-phenyl-1H-benzimidazole

200 mg of 4-methoxy-N^2-phenyl-o-phenylenediamine was dissolved in 5 ml of N,N-dimethylformamide, mixed with 346 mg of EEDQ and 234 mg of 4-nitrobenzoic acid, and the mixture was stirred for 5 hours at 100°C. After cooling, it was mixed with

water. The precipitate was suctioned off and purified by column chromatography, taken up in 6N hydrochloric acid and refluxed for 2 hours. After cooling, it was added in drops to saturated potassium bicarbonate solution. The precipitate was suctioned off and dried.

Flash point 189-191°C

b) 6-Hydroxy-2-(4-nitrophenyl)-1-phenyl-1H-benzimidazole
was obtained by reaction according to general operating instructions 6.

^{1}H-NMR (D_6-DMSO): δ = 6.56 ppm d (J = 2 Hz, 1H); 6.87 dd (J = 10, 2 Hz, 1H); 7.46 dd (J = 10, 2 Hz, 2H); 7.53-7.70 m (4H); 7.75 d (J = 10 Hz, 2H); 8.20 d (J = 10 Hz, 2H); 9.55 s (broad) (1H)

c) 6-[[2-(4-Nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester
was obtained by reaction according to general operating instructions 8.

^{1}H-NMR ($CDCl_3$): δ = 1.45-1.55 ppm m (2H); 1.62-1.84 m (4H); 2.33 t (J = 8 Hz, 2H); 3.68 s (3H); 3.95 t (J = 8 Hz, 2H); 6.67 d (J = 2 Hz, 1H); 7.00 dd (J = 10, 2 Hz, 1H); 7.28-7.38 m (2H); 7.52-7.60 m (3H); 7.71 d (J = 10 Hz, 2H); 7.77 d (J = 10 Hz, 1H); 8.13 d (J = 10 Hz, 2H)

Example 258

6-[[2-(4-Nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanoic acid

was produced according to general operating instructions 9.

Flash point 181-186°C

Example 259

6-[[1-Phenyl-2-(3-pyridinyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was produced analogously to 6-[[1-phenyl-2-(4-pyridinyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester.

Flash point 159-160°C

Example 260

N-(Cyclopropylmethoxy)-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 18.

MS (EI): 469 (molecular ion peak)

Example 261

N-Isobutoxy-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 18.

MS (EI): 471 (molecular ion peak)

Example 262

N-(Phenylmethoxy)-6-[2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]-hexanamide

A solution that consists of 50 mg of 6-[2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]hexanoic acid in 1 ml of tetrahydrofuran was added to a solution that consists of 17 mg of carbonyl diimidazole in 1 ml of tetrahydrofuran, it was stirred for 30 minutes at 20°C and refluxed for 30 minutes. At 20°C, 16 mg of O-benzylhydroxylamine hydrochloride was added, and it was allowed to stir for 20 hours. For working-up, ethyl acetate was added, extracted with 2N hydrochloric acid and saturated sodium bicarbonate solution, dried on sodium sulfate and concentrated by evaporation in a vacuum. The residue was purified by column chromatography on silica gel.

Flash point 145-148°C

Example 263

N-(Cyclopropylmethoxy)-6-[2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]hexanamide

was produced analogously to N-(phenylmethoxy)-6-[2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]hexanamide.

MS (EI): 559 (molecular ion peak)

Example 264

N-Isobutoxy-6-[2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]hexanamide

was produced analogously to N-(phenylmethoxy)-6-[2-phenyl-1-(3,4,5-trimethoxyphenyl)-1H-benzimidazol-6-yl)oxy]hexanamide.

^{1}H-NMR ($CDCl_3$): δ = 0.94 ppm d (J = 8 Hz, 6H); 1.48-2.03 m (7H); 2.05-2.18 m (2H); 3.60-3.72 m (2H); 3.76 s (6H); 3.90-4.00

m (2H); 3.96 s (3H); 6.50 s (2H); 6.72 d (J = 2 Hz, 1H); 6.95 dd (J = 10, 2 Hz, 1H); 7.28-7.38 m (3H); 7.55-7.62 m (2H); 7.74 d (J = 10 Hz, 1H); 8.20 s (broad) (1H)

Example 265

N-Isopropyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 17.

Flash point 107-112°C

Example 266

N,N-Dimethyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 17.

Flash point 83-88°C

Example 267

6-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]-1-pyrrolidin-1-ylhexan-1-one

was produced according to general operating instructions 17.

Flash point 84-88°C

Example 268

N-(2-Methoxyethyl)-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 17.

Flash point 63-68°C

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Example 269

N-(3-Methoxypropyl)-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 18.

Flash point 84-91°C

Example 270

N-Isobutyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 17.

^{1}H-NMR ($CDCl_3$): δ = 0.90 ppm d (J = 8 Hz, 6H); 1.44-1.57 m (2H); 1.65-1.85 m (5H); 2.20 t (J = 8 Hz, 2H); 3.08 t (J = 8 Hz, 2H); 3.94 t (J = 8Hz, 2H); 6.68 d (J = 2 Hz, 1H); 6.96 dd (J = 10, 2 Hz, 1H); 7.25-7.38 m (5H); 7.45-7.58 m (5H); 7.75 d (J = 10 Hz, 1H)

Example 271

N-[[2,2-Dimethylamino)ethyl]-N-methyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)-oxy]hexanamide

was produced according to general operating instructions 17.

^{1}H-NMR ($CDCl_3$) (signal of the main rotamer): δ = 1.44-1.57 ppm m (2H); 1.64-1.84 m (4H); 2.30 s (6H); 2.34 t (J = 8 Hz, 2H); 2.47 t (J = 8 Hz, 2H); 3.00 s (3H); 3.50 t (J = 8 Hz, 2H); 3.94 t (J = 8 Hz, 2H); 6.69 d (J = 2 Hz, 1H); 6.96 dd (J = 10, 2 Hz, 1H); 7.25-7.36 m (5H); 7.45-7.56 m (5H); 7.73 d (J = 10 Hz, 1H)

Example 272

N-(2-Methoxyethyl)-N-methyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 17.

^{1}H-NMR ($CDCl_3$) (signal of the main rotamer): δ = 1.43-1.58 ppm m (2H); 1.63-1.84 m (4H); 2.33 t (J = 8 Hz, 2H); 3.07 s (3H); 3.32 s (3H); 3.47-3.58 m (4H); 3.95 t (J = 8 Hz, 2H); 6.70 d (J = 2 Hz, 1H); 6.96 dd (J = 10, 2 Hz, 1H); 7.25-7.35 m (5H); 7.45-7.55 m (5H); 7.75 d (J = 10 Hz, 1H)

Example 273 6-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]-1-morpholin-1-ylhexan-1-one

was produced according to general operating instructions 17.

^{1}H-NMR ($CDCl_3$): δ = 1.47-1.59 ppm m (2H); 1.63-1.88 m (4H); 2.34 t (J = 8 Hz, 2H); 3.42-3.49 m (2H); 3.57-3.70 m (6H); 3.94 t (J = 8 Hz, 2H); 6.68 d (J = 2 Hz, 1H); 6.96 dd (J = 10, 2 Hz, 1H); 7.23-7.38 m (5H); 7.45-7.56 m (5H); 7.75 d (J = 10 Hz, 1H)

Example 274

N,N-Di(-2-methoxyethyl)-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 18.

Flash point 88-98°C

Example 275

N-Isopentyl-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 18.

Flash point 127-129°C

Example 276

N-(Pyridin-2-yl)-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 18.

Flash point 120-124°C

Example 277

N-(Pyridin-3-yl)-6-[(1,2-diphenyl-1H-benzimidazol-6-yl)oxy]hexanamide

was produced according to general operating instructions 18.

Flash point 154°C

Example 278

6-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]-1-piperidin-1-ylhexan-1-one

was produced according to general operating instructions 18.

Flash point 93-98°C

Example 279

[6-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]-1-hexanoyl]piperidine-4-carbonamide

was produced according to general operating instructions 17.

Flash point 177-178°C

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Example 280 [[6-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]-1-hexanoyl]methylamino]-acetic acid ethyl ester

was produced according to general operating instructions 17.

^{1}H-NMR ($CDCl_3$) (signal of the main rotamer): δ = 1.23 ppm t (J = 8 Hz, 3H); 1.45-1.88 m (6H); 2.40 t (J = 8 Hz, 2H); 3.08 s (3H); 3.93 t (J = 8 Hz, 2H); 4.12 s (2H); 4.18 q (J = 8 Hz, 2H); 6.70 d (J = 2 Hz, 1H); 6.97 dd (J = 10, 2 Hz, 1H); 7.23-7.35 m (5H); 7.45-7.58 m (5H); 7.75 d (J = 10 Hz, 1H)

Example 281

4-[[6-[(1,2-Diphenyl-1H-benzimidazol-6-yl)oxy]-1-hexanoyl]]piperazine-1-carboxylic acid ethyl ester

was produced according to general operating instructions 17.

^{1}H-NMR ($CDCl_3$): δ = 1.27 ppm t (J = 8 Hz, 3H); 1.45-1.60 m (2H); 1.63-1.88 m (4H); 2.36 t (J = 8 Hz, 2H); 3.40-3.53 m (6H); 3.56-3.64 m (2H); 3.93 t (J = 8 Hz, 2H); 4.15 q (J = 8 Hz, 2H); 6.69 d (J = 2 Hz, 1H); 6.96 dd (J = 10, 2 Hz, 1H); 7.23-7.38 m (5H); 7.45-7.56 m (5H); 7.76 d (J = 10 Hz, 1H)

Example 282

N-Isopropyl-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

MS (EI): 469 (molecular ion peak)

09955795.011601

Example 283

N,N-Dimethyl-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]-hexanamide

was produced according to general operating instructions 18.

MS (EI): 455 (molecular ion peak)

Example 284

N,N-Diethyl-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

MS (EI): 483 (molecular ion peak)

09759375.071601

Example 285

N-Isobutyl-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

^{1}H-NMR ($CDCl_3$): δ = 0.90 ppm d (J = 8 Hz, 6H); 1.44-1.55 m (2H); 1.58-1.83 m (5H); 2.20 t (J = 8 Hz, 2H); 2.30 s (3H); 2.35 s (3H); 3.09 t (J = 8 Hz, 2H); 3.94 t (J = 8 Hz, 2H); 6.63 d (J = 2 Hz, 1H); 6.94 dd (J = 10, 2 Hz, 1H); 7.02 dd (J = 10, 2 Hz, 1H); 7.10 d (J = 2 Hz, 1H); 7.22-7.35 m (4H); 7.56 dd J = 8 Hz, and 2 Hz, 2H); 7.73 d (J = 10 Hz, 1H)

Example 286

N-Cyclopropyl-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]-hexanamide

was produced according to general operating instructions 18.

MS (EI): 467 (molecular ion peak)

Example 287

N-Cyclobutyl-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]-oxy]hexanamide

was produced according to general operating instructions 18.

^{1}H-NMR ($CDCl_3$): δ = 1.42-1.55 ppm m (2H); 1.60-1.88 m (8H); 2.15 t (J = 8 Hz, 2H); 2.28-2.40 m (2H); 2.30 s (3H); 2.35 s (3H); 3.93 t (J = 8 Hz, 2H); 4.40 quintet (J = 8 Hz, 2H); 5.55 s (broad) (1H); 6.63 d (J = 2 Hz, 1H); 6.92 dd (J = 10, 2 Hz, 1H); 7.03 dd (J = 10 Hz, and 2 Hz, 1H); 7.08 d (J = 2 Hz, 1H); 7.20-7.36 m (4H); 7.57 dd (J = 8, 2 Hz, 2H); 7.72 d (J = 10 Hz, 1H)

Example 288

N-tert-Butyl-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

^{1}H-NMR ($CDCl_3$): δ = 1.32 ppm s (9H); 1.42-1.55 m (2H); 1.62-1.82 m (4H); 2.10 t (J = 8 Hz, 2H); 2.30 s (3H); 2.36 s (3H); 3.92 t (J = 8 Hz, 2H); 5.23 s (broad) (1H); 6.66 d (J = 2 Hz, 1H); 6.93 dd (J = 10, 2Hz, 1H); 7.02 dd (J = 10 Hz, and 2 Hz, 1H); 7.02 s (broad) (1H); 7.22-7.36 m (4H); 7.56 dd (J = 8, 2 Hz, 2H); 7.73 d (J = 10 Hz, 1H)

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Example 289

(R)-6-[[1-(3,4-Dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]1-(2-methoxy-methyl)pyrrolidin-1-ylhexan-1-one

was produced according to general operating instructions 18.

MS (EI): 467 (molecular ion peak)

Example 290

N-(3-Imidazol-1-yl-propyl)-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

^{1}H-NMR ($CDCl_3$): δ = 1.42-1.53 ppm m (2H); 1.62-2.02 m (6H); 2.17 t (J = 8 Hz, 2H); 2.27 s (3H); 2.34 s (3H); 3.24 q (J = 8 Hz, 2H); 3.92 t (J = 8 Hz, 2H); 3.96 t (J = 8 Hz, 2H); 5.68 s (broad) (1H); 6.63 d (J = 2 Hz, 1H); 6.88-6.95 m (2H); 7.00 dd (J = 10 Hz, and 2 Hz, 1H); 7.04-7.10 m (2H); 7.20-7.36 m (4H); 7.50 s (broad) (1H); 7.53 dd (J = 8, 2 Hz, 2H); 7.72 d (J = 10 Hz, 1H)

Example 291

N-(2-Pyridin-2-ylethyl)-6-[[1-(3,4-dimethylphenyl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

^{1}H-NMR ($CDCl_3$): δ = 1.38-1.52 ppm m (2H); 1.62-1.82 m (4H); 2.15 t (J = 8 Hz, 2H); 2.30 s (3H); 2.35 s (3H); 2.96 t (J = 8 Hz, 2H); 3.66 q (J = 8 Hz, 2H); 3.90 t (J = 8 Hz, 2H); 6.48 s (broad) (1H); 6.65 d (J = 2 Hz, 1H); 6.92 dd (J = 10, 2 Hz, 1H); 7.00 d (J = 10 Hz, and 2 Hz, 1H); 7.06-7.38 m (7H); 7.53-7.62 m (3H); 7.72 d (J = 10 Hz, 1H); 8.50 d (broad) (J = 6 Hz, 1H)

Example 292

N,N-Dimethyl-6-[[2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

^{1}H-NMR ($CDCl_3$): δ = 1.46-1.58 ppm m (2H); 1.64-1.88 m (4H); 2.32 t (J = 8 Hz, 2H); 2.93 s (3H); 3.00 s (3H); 3.96 t (J = 8 Hz, 2H); 6.65 d (J = 2 Hz, 1H); 7.00 dd (J = 10, 2 Hz, 1H); 7.28-7.36 m (2H); 7.53-7.61 m (3H); 7.70 d (J = 10 Hz, 2H); 7.76 d (J = 8 Hz, 1H); 8.13 d (J = 8 Hz, 2H)

Example 293

N-Isopropyl-6-[[2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

Flash point 162-165°C

Example 294

N-Isopentyl-6-[[2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

Flash point 148-154°C

Example 295

N-(3-Methoxypropyl)-6-[[2-(4-nitrophenyl)-1-phenyl-1H-benzimidazol-6-yl]-oxy]hexanamide

was produced according to general operating instructions 18.

Flash point 104-110°C

Example 296

N-(3-Methoxypropyl)-6-[[1-(indan-5-yl)-2-phenyl-1H-benzimidazol-6-yl]oxy]hexanamide

was produced according to general operating instructions 18.

^{1}H-NMR ($CDCl_3$): δ = 1.43-1.56 ppm m (2H); 1.62-1.85 m (6H); 2.10-2.23 m (4H); 2.95 t (J = 10 Hz, 2H); 3.00 t (J = 10 Hz, 2H); 3.32 s (3H); 3.32-3.40 m (2H); 3.48 t (J = 8 Hz, 2H); 3.93 t (J = 8 Hz, 2H); 6.03 s (broad) (1H); 6.67 d (J = 2 Hz, 1H); 6.93 dd (J = 10, 2 Hz, 1H); 7.03 dd (J = 10, 2 Hz, 1H); 7.12 s (broad) (1H); 7.26-7.35 m (4H); 7.55 dd (J = 10 Hz, 2H); 7.72 d (J = 8 Hz, 1H)

Example 297

6-[[1-(4-Methylphenyl)-2-(3-pyridyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 3-pyridylcarbaldehyde according to general operating instructions 16.

MS (EI): 429 (molecular ion peak)

Example 298

6-[[1-(4-Methylphenyl)-2-(4-pyridyl)-1H-benzimidazol-6-yl)oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 4-

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pyridylcarbaldehyde according to general operating instructions 16.

MS (EI): 429 (molecular ion peak)

Example 299

6-[[1-(4-Methylphenyl)-2-(2-thienyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 2-thienylcarbaldehyde according to general operating instructions 16.

MS (EI): 434 (molecular ion peak)

Example 300

6-[[1-(4-Methylphenyl)-2-(3-thienyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 3-thienylcarbaldehyde according to general operating instructions 16.

MS (EI): 434 (molecular ion peak)

Example 301

6-[[2-(3-Indolyl)-1-(4-methylphenyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 3-

indolylcarbaldehyde according to general operating instructions 16.

MS (EI): 467 (molecular ion peak)

Example 302

6-[[1-(4-Methylphenyl)-2-(2-furyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 2-furylcarbaldehyde according to general operating instructions 16.

MS (EI): 418 (molecular ion peak)

Example 303

6-[[1-(4-Methylphenyl)-2-(3-furyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 3-furylcarbaldehyde according to general operating instructions 16.

MS (EI): 418 (molecular ion peak)

Example 304

6-[[1-(4-Methylphenyl)-2-(5-methyl-2-thienyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 5-methyl-2-thienyl-carbaldehyde according to general operating instructions 16.

MS (EI): 448 (molecular ion peak)

Example 305

6-[[1-(4-Methylphenyl)-2-(4-bromo-2-thienyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 4-bromo-2-thienylcarbaldehyde according to general operating instructions 16.

MS (EI): 512/514 (molecular ion peak)

Example 306

6-[[1-(4-Methylphenyl)-2-(3-methyl-2-thienyl)-1H-benzimidazol-6-yl]oxy]hexanoic acid methyl ester

was obtained by reaction of 6-[[4-amino-3-((4-methylphenyl)amino)phenyl]-oxy]hexanoic acid methyl ester with 3-methyl-2-thienylcarbaldehyde according to general operating instructions 16.

MS (EI): 448 (molecular ion peak)

Example 307: Inhibition of Microglia Activation

For **in vitro** production of Aβ-activated microglia, primary rat microglia with synthetic Aβ-peptide are incubated:

For simulation of Aβ deposits, synthetic Aβ peptide is dried on 96-hole tissue culture plates. A peptide stock solution is diluted by 2 mg/ml of H_2O 1:50 in H_2O. To coat the 96-hole plates, 30 μl of this dilute peptide solution/hole is used, and it is dried overnight at room temperature.

Primary rat microglia are harvested by mixed glia cultures, which were obtained from P3 rat brains. In the production of mixed glia cultures, the brains are taken from 3-day-old rats, and meninges are removed. The isolation of cells is achieved by trypsinization (0.25% trypsin solution, 15 minutes at 37°C)). After undigested tissue fragments are separated with the aid of a 40 μm nylon mesh, the isolated cells are centrifuged off (800 rpm/10 min). The cell pellet is resuspended in the culture medium and moved into 100 ml tissue culture flasks (1 brain/tissue culture flask). The cultivation of the cells is carried out over a period of 5-7 days in Dulbeccos modified Eagle Medium (DMEM, with glutamine), supplemented with penicillin (50 U/ml), streptomycin (40 μg/ml) and 10% (v/v) fetal calf serum (FCS) at 37°C and 5% CO_2. During this incubation, an adhesive cellular film is formed, which mainly consists of astrocytes. Microglia proliferate as non-adhesive or weakly adhesive cells on the latter and are harvested via shaking incubation (420 rpm, 1 hour).

To activate the microglia by Aβ-peptide, 2.5 x 10^4 microglia/hole are grown on the Aβ-coated tissue culture plates and incubated over a period of 7 days in DMEM (with glutamine), supplemented with penicillin (50 U/ml), streptomycin (40 μg/ml) and 10% (v/v) fetal calf serum (FCS) at 37°C and 5% CO_2. On day 5, a compound according to the invention is added at various concentrations (0.1, 0.3, 1.3 and 10 μM).

To quantify the microglia reactivity, the metabolic activity is measured on cultivation day 7 via the reduction of MTS (3-(4,5-dimethylthiazol-2-yl)-5-(3carboxymethoxyphenyl)-2-(sulfophenyl)-2H-tetrazolium), Owen's reagent, Baltrop, J. A. et al. Bioorg. & Med. Chem. Lett 1, 6111 (1991)). The percentage of inhibition relates to a control that is treated only with DMSO. The compounds according to the invention inhibit the microglia activation.

Example 308: Cerebral Brain Infarction in Rats (MCAO Model)

The compounds according to the invention were tested for **in vivo** activity in an animal model for cerebral ischemia (stroke), the MCAO (permanent middle cerebral artery occlusion) model. One-sided obstruction of the middle cerebral artery (MCA) triggers a brain infarction, which is caused by the fact that the corresponding area of the brain is undernourished with oxygen and nutrients. The result of this undernourishment is a pronounced cellular degeneration and, subsequently, a strong microglia activation. This microglia activation reaches its maximum only after several days, however, and can last for several weeks. To test the substances, the compounds according to the invention were administered intraperitoneally 1-6 days after occlusion. On day 7, the animals were perfused and sacrificed. The extent of the microglia activation was measured by a modified immunohistochemical method. Vibratom sections of fixed brains were incubated with antibodies, whereby said sections detect the CR3 complement receptor or the MHCII complex from activated microglia. The quantification of the primary antibody bond was carried out by an enzyme-coupled detection system. The treatment with the compounds according to the invention resulted in a significant reduction of microglia activation in the brain hemisphere affected by the brain infarction. The reduction was at least 20%.

Example 309: Activation of Macrophages

To test substances on macrophages/monocytes, LPS-activated THP-1 cells were used. For this purpose, 2.5 x 106 cells/ml in RPMI medium (RPMI 1640 + 10% FCS) were grown. The compounds according to the invention were added at a concentration of 5 μM and pre-incubated for 30 minutes. The stimulation of the cells was carried out overnight at 37C with 1 μg/ml of LPS. Then, the medium was harvested, and the amount of TNFα was determined quantitatively. The treatment of the cells with the substances according to the invention resulted in a reduction of the amount of TNF_{α} of at least 30%.

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